

CLAIMS

1/ A method of manufacturing a part out of reinforced plastics material, the method comprising the following steps:

- 5 - superposing at least one sheet and at least one item of local reinforcement in a mold before the mold is closed, at least one of the sheet and the local reinforcement being constituted by reinforcing fibers and thermoplastic material, the mold having a setback
10 adjacent to the local reinforcement and of width greater than the local reinforcement; and
 - introducing thermoplastic material into the setback in such a manner as to compact the local reinforcement and an underlying region of the sheet, the
15 mold being shaped so as to compress the sheet on either side of the local reinforcement during closure of the mold.

2/ A method according to claim 1, in which the compacting
20 of the local reinforcement and of the underlying region of the sheet is performed by depositing thermoplastic material in register with the setback and then closing the mold.

25 3/ A method according to claim 1, in which the sheet is constituted by a fabric of yarn constituted by glass fibers and thermoplastic material.

30 4/ A method according to claim 1, in which the local reinforcement is constituted by a fabric of yarn constituted by glass fibers and thermoplastic material.

35 5/ A method according to claim 1, in which the sheet and the local reinforcement are constituted by a fabric of yarn constituted by glass fibers and thermoplastic material.

6/ A method according to claim 1, used for manufacturing a bumper beam for a motor vehicle.

5 7/ A method according to claim 1, in which the thermoplastic material introduced into the setback comes into contact with the local reinforcement.

8/ A method according to claim 1, in which the sheet is a single sheet.

10 9/ A method according to claim 1, in which the part is a structural part of a motor vehicle.

10/ A part made of reinforced thermoplastic material
15 obtained by implementing the method as defined in claim 1.

11/ A part made of reinforced thermoplastic material comprising a non-plane sheet of a fabric of yarn
20 constituted by glass fibers and thermoplastic material, locally lined by local reinforcement over which a mass of thermoplastic material is overmolded and overflows slightly onto the sheet on either side of said local reinforcement.

25 12/ A method of manufacturing a motor vehicle part out of reinforced plastics material, the method comprising the following steps:

- superposing at least one sheet and at least one
30 item of local reinforcement in a mold before the mold is closed, at least one of the sheet and the local reinforcement being constituted by reinforcing fibers and thermoplastic material, the mold having a setback adjacent to the local reinforcement and of width greater
35 than the local reinforcement; and

- after closing the mold, injecting thermoplastic material into the setback so as to compact the local

reinforcement and an underlying region of the sheet, the mold being shaped so as to compress the sheet on either side of said local reinforcement during closure of the mold.

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13/ A method of manufacturing a motor vehicle part out of reinforced plastics material, the method comprising the following steps:

10 - superposing at least one sheet and at least one item of local reinforcement in a mold before the mold is closed, at least one of the sheet and the local reinforcement being constituted by reinforcing fibers and thermoplastic material, the mold having a setback adjacent to the local reinforcement and of width greater
15 than the local reinforcement; and

 - introducing thermoplastic material into the setback so as to compact the local reinforcement and an underlying region of the sheet, the mold being shaped to compress the sheet on either side of the local
20 reinforcement during closure thereof, the setback being hollowed out between regions of the mold that are designed to compress the sheet.

25 14/ A method of manufacturing a motor vehicle part out of reinforced plastics material, the method comprising the following steps:

30 - superposing at least one sheet and at least one item of local reinforcement in a mold before the mold is closed, at least one of the sheet and the local reinforcement being constituted by reinforcing fibers and thermoplastic material, the mold having a setback adjacent to the local reinforcement and of width greater than the local reinforcement, the sheet including at
35 least one portion that projects outside the mold;

 - introducing thermoplastic material into the setback in such a manner as to compact the local reinforcement and the underlying region of the sheet, the

mold being shaped to compress the sheet on either side of the local reinforcement during closure of the mold; and

- after closure of the mold, trimming off said at least one portion.